

1       **What is claimed is:**  
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3       1. Telephone answering apparatus for a subscriber of a paging system, said  
4       apparatus coupled to a telephone network for automatically receiving telephone calls  
5       including corresponding paging messages directed to said subscriber, such telephone  
6       calls including corresponding source identifications signals generated by the telephone  
7       network to identify the name and telephone numbers of the corresponding sources of the  
8       telephone calls, said apparatus also coupled to a paging terminal of said paging system,  
9       said paging terminal operative to transmit paging messages to a portable paging receiver  
0       of said subscriber, said apparatus comprising:

1               means for storing a set of predetermined source identification codes;  
2

3               means coupled to the telephone network for automatically receiving telephone  
4       calls directed to said subscriber and for decoding the source identification signals  
5       thereof to generate corresponding decoded source identification codes;  
6

7               controller means coupled to said receiving means for selecting paging messages  
8       of the received telephone calls based on a correlation of the decoded source  
9       identification codes to said telephone calls with at least one of said stored set of  
0       predetermined source identification codes;  
1

2               means for coupling to said paging terminal and governed by said controller means  
3       to direct said selected paging messages to said paging terminal for transmission to  
4       said subscriber's paging receiver wherein said paging message is comprised of at  
5       least data representing the said source identification signal.  
6

1        2.     The apparatus in claim 1 wherein said paging message is comprised of said  
2        source identification signal and data representing a voice message.

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4  
5        3.     The apparatus in claim 1, including a storage means for storing said decoded  
6        source identification codes and said voice message data.

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8  
9        4.     The apparatus in claim 1 including a text to speech means wherein said source  
0        identification signal received and decoded is converted to stored audible voice data.  
1

1 5. Telephone answering apparatus for a subscriber of a paging system, said  
2 apparatus coupled to a telephone network for automatically receiving telephone calls  
3 including corresponding paging messages directed to said subscriber, such telephone  
4 calls including corresponding audible voice source identification signals generated by the  
5 telephone network to identify the telephone numbers of the corresponding sources of the  
6 telephone calls, said apparatus also coupled to a paging terminal of said paging system,  
7 said paging terminal operative to transmit paging messages to a portable paging receiver  
8 of said subscriber, said apparatus comprising:

9  
0 means coupled to the telephone network for automatically receiving telephone  
1 calls directed to said subscriber and for storing the audible voice source  
2 identification signals;

3  
4 controller means coupled to said receiving means for selecting paging messages  
5 of the received telephone calls;

6  
7 means for coupling to said paging terminal and governed by said controller means  
8 to direct said selected paging messages to said paging terminal for transmission to  
9 said subscriber's paging receiver wherein said paging message is comprised of at  
0 least audible voice data representing the said source identification signal;

1 6. The apparatus in claim 1 where source identification signals received are  
2 automatically supplied from the telephone network as Automatic Number Identification  
3 signals.  
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5  
6 7. The apparatus in claim 1 where source identification signals received are  
7 automatically supplied from the telephone network as Caller Identification signals.  
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9  
0 8. The apparatus in claim 1 where source identification signals received are DTMF  
1 signals manually entered by a calling party after an on-hook condition.  
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4 9. The apparatus in claim 1 where source identification signals received are fax  
5 header signals automatically sent by a calling facsimile apparatus.  
6

1           10.    A paging system, comprising:

2  
3           a paging center;

4  
5           a telephone answering device;

6  
7           said telephone answering device including:

8           (a)    means for receiving, via the telephone lines, a signal representative of a  
9                   caller's name and telephone number sent before the telephone answering  
0                   device is engaged in a closed loop condition;

1  
2           (b)    means for transmitting a prerecorded outgoing message to a caller, via a  
3                   closed loop of telephone lines, upon reception of an incoming telephone  
4                   call, and for storing a caller's voice message and the said signal  
5                   representative of a caller's name and telephone number whereby the  
6                   subscriber can obtain the caller's stored voice message and associated  
7                   source identification signal;

8  
9           (c)    means for automatically, temporarily releasing the closed loop of the  
0                   telephone lines, and for reestablishing the closed loop of the telephone  
1                   lines after said voice message and source identification signal is received  
2                   and stored;

3  
4           (d)    means for calling the paging center, after said closed loop of the telephone  
5                   lines is reestablished; and

6  
7           (e)    means for transmitting said stored voice message and source identification  
8                   signal to the paging center via the telephone lines;

1 a portable receiver unit, adapted to be called by the paging center, with a display  
2 window for displaying data corresponding to said source identification signal;

3  
4 whereby the subscriber through the portable receiver unit is notified of the caller's  
5 identity and can selectively retrieve the associated voice message for annunciation stored  
6 in the portable receiver unit.  
7

1 11. A paging system, comprising:

2  
3 a paging center;

4  
5 a telephone answering device;

6  
7 said telephone answering device including:

8  
9 (a) means for receiving, via the telephone lines, a signal representative of a  
0 caller's telephone number sent before the telephone answering device is  
1 engaged in a closed loop condition;

2  
3 (b) means for transmitting a prerecorded outgoing message to a caller, via a  
4 closed loop of telephone lines, upon reception of an incoming telephone  
5 call, and for storing a caller's voice message and the said signal  
6 representative of a caller's telephone number whereby the subscriber can  
7 obtain the caller's stored voice message and associated source  
8 identification signal;

9  
0 (c) means for automatically, temporarily releasing the closed loop of the  
1 telephone lines, and for reestablishing the closed loop of the telephone  
2 lines after said voice message and source identification signal is received  
3 and stored;

4  
5 (d) means for calling the paging center, after said closed loop of the telephone  
6 lines is reestablished; and

7  
8 (e) means for transmitting at least said source identification signal to the paging  
9 center via the telephone lines;

1  
2 a portable receiver unit, adapted to be called by the paging center, with a display  
3 window for displaying data corresponding to said source identification signal;  
4

5 whereby the subscriber through the portable receiver unit is notified of the caller's  
6 identity and can directly call and talk to the caller from outside the subscriber's office or  
7 can directly call and listen to the voice message at said telephone answering device at  
8 said subscriber's office.  
9



1 12. The paging system in claim 8 wherein said source of identification signals are  
2 audible voice signals and said portable receiver unit contains a sound output means  
3 whereby said received source identification signals may be annunciated for the called  
4 subscriber.

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7 13. The paging system in claim 8 wherein is provided a means for providing a caller an  
8 audible verification of the stored name and telephone number signal data received prior to  
9 ending the call and means for allowing the caller to selectively replace the stored caller  
0 identifying information prior to ending the call for transmission to a portable receiver  
1 device.  
2

1 14. A method of communication information wherein said method of initiating  
2 communication between a calling party and a paging network involves the steps of:

3  
4 providing a called party location with a caller identification and optional data  
5 detection and storage means, and a communication means to initiate a communication  
6 with a paging network;

7  
8 initiating a first communication between a calling party and a called party location  
9 over a telephone network;

0  
1 receiving and storing at a called party location at least caller identification  
2 information automatically supplied from the telephone network;

3  
4 receiving and storing at a called party location optional data from the calling party;

5  
6 terminating said first communication between said calling party and said called  
7 party location over said telephone network;

8  
9 automatically initiating a second communication between said called party location  
0 and said paging network through said telephone network;

1  
2 automatically recalling said stored caller identification information and said optional  
3 data from said called party location storage means and transmitting to said paging  
4 network through said telephone network;

5  
6 receiving said caller identification information and said optional data at said  
7 portable communication device identified in said paging network to said called party  
8 subscriber.  
9

1  
2 15. A method of communication information wherein said method of initiating  
3 communication between a calling party and a paging network involves the steps of:

4  
5 providing a called party location with a caller identification and optional data  
6 detection and storage means, and a communication means to initiate a communication  
7 with a paging network;

8  
9 initiating a first communication between a calling party and a called party location  
0 over a telephone network;

1  
2 receiving and storing at a called party location at least caller identification  
3 information automatically supplied from the telephone network;

4  
5 receiving and storing at a called party location optional data from the calling party;  
6 terminating said first communication between said calling party and said called  
7 party location over said telephone network;

8  
9 automatically initiating a second communication between said called party location  
0 and said paging network;

1  
2 automatically recalling said stored caller identification information and said optional  
3 data from said called party location storage means and transmitting to said paging  
4 network through said telephone network;

5  
6 receiving said caller identification information and said optional data at said  
7 portable communication device identified in said paging network to said called party  
8 subscriber.  
9

1 16. A method of communicating information from a calling party to a called party  
2 utilizing a paging network a telephone answering apparatus and a telephone network,  
3 said information including caller identification information including at least a bit string  
4 representation of a telephone number for a particular telephone unit used by said calling  
5 party, comprising the method steps of:

6  
7 providing a portable communication device identified in said paging network to said  
8 called party;

9  
0 initiating communication between said calling party to said paging network through  
1 said telephone network and said telephone answering apparatus;

2  
3 automatically passing said caller-identification information from said telephone  
4 network to said paging network without requiring entry of said caller-identification  
5 information by said calling party;

6  
7 transmitting to said called party portable communication device at least said caller  
8 identification information from said telephone answering apparatus and said paging  
9 network.  
0  
1  
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1 17. A method of communicating information from a calling party to a called party  
2 utilizing a paging network a telephone answering apparatus and a telephone network,  
3 said information including at least caller identification information comprised of voice  
4 signal data representative of the identity said calling party, comprising the method steps  
5 of:

6  
7 providing a portable communication device identified in said paging network to said  
8 called party;

9  
0 initiating communication between said calling party to said paging network through  
1 said telephone network and said telephone answering apparatus;

2  
3 automatically passing said caller-identification information from said telephone  
4 network to said paging network without requiring entry of said caller-identification  
5 information by said calling party;

6  
7 transmitting to said called party portable communication device at least said caller  
8 identification information from said telephone answering apparatus and said paging  
9 network.  
0

1 18. A method of communicating information from a calling party to a called party  
2 utilizing a paging network a telephone answering apparatus and a telephone network,  
3 said information including caller identification information including at least a bit string  
4 representation of a telephone number for a particular telephone unit used by said calling  
5 party, comprising the method steps of:

6 Providing a portable communication device identified in said paging network to  
7 said called party;

8  
9 initiating communication between said calling party to said paging network through  
0 said telephone network and said telephone answering apparatus;

1  
2 automatically passing said caller-identification information from said telephone  
3 network to said paging network without requiring entry of said caller-identification  
4 information by said calling party;

5  
6 transmitting to said called party portable communication device at least said caller  
7 identification information from said telephone answering apparatus and said paging  
8 network

9  
0 comparing caller identification information received with data prestored in said  
1 called party portable communication device;

2  
3 providing to said called party said caller identification information and associated  
4 said prestored data from said comparing means for display or annunciation.  
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